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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,191	01/26/2004	Masahito Nasu	1466.1083	6426

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EXAMINER

LO, SUZANNE

ART UNIT	PAPER NUMBER
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2128

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12/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/763,191	Applicant(s) NASU, MASAHI TO	
	Examiner Suzanne Lo	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 have been presented for examination. The Request for Continued Examination submitted 10/02/07 has been acknowledged.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 3-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter; specifically, the claims are directed towards software *per se*. While, the claims are directed to a partial reprojection device comprising a reprojection processing portion and a modeling kernel and should be considered an apparatus, it recites no structure and can be entirely embodied by software. In reference to Figure 6 which displays said components of the device, the Specification of the instant application, paragraph [0038] reads, the CPU and the main memory constitute the CAD system mainly and a portion relevant to the partial reprojection process is shown as a partial reprojection device 1 including functional blocks. As the CPU and main memory do not constitute the CAD system entirely, the device which is part of the CAD system – though Figure 6 and the specification are unclear how, can be entirely embodied by software without accompanying hardware.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the claimed invention will perform a partial reprojection based on the specified two-

dimensional elements if all the two-dimensional elements are specified to be updated when updating the shape in the three-dimensional model.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-7 are rejected** under 35 U.S.C. 102(b) as being clearly anticipated by **Unigraphics Solutions™** (“User’s Guide Getting Started with SOLID EDGE™ Ver. 8.0”).

As per **claim 1**, Unigraphics is directed to a partial reprojection method for reflecting a shape modified in a part model on a two-dimensional projection that is generated from an assembly model in a three-dimensional CAD system, the method comprising: grouping elements projected from the assembly model for each part (**page 274, Documenting Multiple Parts in One Draft Document and page 150, “Maintaining Relationships” and “How Relationships Work”**); adding attributions of each part information to the two-dimensional projection, the attributions including a line of sight and a position of the part (**page 296 Annotations and Associativity and page 269 Setting Projection Angle, page 280 “When you change parts and assemblies in part views, you can easily update the views so they match the new model geometry.” and page 298, Hole Table**); and specifying two-dimensional elements to be updated when updating the shape in the part model (**page 280, Part View Updates**); *deciding* a projecting direction of the part model from the line of sight of each part included in the part information (**page 280, Part View Updates, 2-D diagram drawing**); *deciding* a generating position of the two-dimensional elements from the position of the part included in the part information (**page 280,**

Part View Updates, 2-D diagram drawing); and performing the partial reprojection of the shape modified in a three-dimensional part model based on the specified two-dimensional elements, the decided projecting direction and the decided generating position (page 280, Part View Updates).

As per claim 2, Unigraphics is directed to the partial reprojection method according to claim 1, further comprising: adding attributions of projection information to the two-dimensional projection, the attributions including information about a loaded model and information about a model to be projected (page 282-283 Retrieving Dimensions and Annotations and page 280, 2nd paragraph, “When a drawing view is out-of-date with respect to the 3-D model...”); and deciding whether the entire reprojection is performed from the assembly model or a partial reprojection is performed for a part in accordance with the projection information (page 282 Setting Retrieval Options), wherein if the partial reprojection is performed, the attributions of the part information and the projection information are not changed but only the shape is changed (page 282-283 Dimension Retrieval).

As per claim 3, Unigraphics is directed to a partial reprojection device for reflecting a shape modified in a part model on a two-dimensional projection that is generated from an assembly model in a three-dimensional CAD system, the device comprising a reprojection processing portion controlling a partial reprojection process; and a modeling kernel performing processes including a contour line process and a hidden line process, wherein the reprojection processing portion includes: an associative analysis processing portion analyzing information of the two-dimensional projection to be reprojected (page 280, Part View Updates); a drawing processing portion deciding three-dimensional elements to be projected in association with the modeling kernel from three-dimensional shape data and a projection condition (page 280, Part View Updates); a *partial reprojection* drawing data generation processing portion generating the decided three-dimensional elements as two-dimensional elements on the drawing *based on the projection condition* (page 280, Part View Updates); and an associative setting processing portion

grouping the generated two-dimensional elements for each part and for setting a relationship with conditions and the models (**page 282-283 Retrieving Dimensions and Annotations**).

As per claims 4-5, Unigraphics is directed to an apparatus in a three-dimensional CAD system enabling reflection of a shape modified in a part model on a two-dimensional projection generated from an assembly model, said apparatus comprising: a controller to control the apparatus according to a process, comprising the method steps of claims 1-2 and are therefore rejected under the same prior art.

As per claims 6-7, Unigraphics is directed to a computer-readable medium storing a program for a three-dimensional CAD system that enables reflection of a shape modified in a part model on a two-dimensional projection generated from an assembly model, the program causing a computer perform the method steps of claims 1-2 and are therefore rejected under the same prior art.

Response to Arguments

5. Applicant's arguments filed 10/02/07 have been fully considered but they are not persuasive.

6. In response to Applicant's argument that Unigraphics, page 271 does not disclose the limitations, "specifying two-dimensional elements to be updated when updating the shape in the three-dimensional part model; deciding a projecting direction of the three-dimensional part model from the line of sight of each part included in the part information; deciding a generating position of the two-dimensional elements of the part from the position of the part included in the part information" the Applicant is further directed to page 280, Part View Updates. The projection direction and generating position is decided by the original direction and position of the 2-D drawing to be updated. Furthermore, Solid Edge automatically specifies all two-dimensional elements to be updated.

7. Applicant argues that Unigraphics does not disclose, "performing the partial reprojection of the shape modified in a three-dimensional part model based on the specified two-dimensional elements". In response to applicant's allegation that the references fail to show certain features of applicant's invention,

it is noted that the features upon which applicant relies are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Performing a partial reprojection of a shape based on the specified two-dimensional elements does not require that the entire part model cannot be reloaded especially in light of the fact that if all the two-dimensional elements in the part model are specified, then the entire part model is reloaded.

Conclusion

8. The prior art made of record is not relied upon because it is cumulative to the applied rejection.

These references include:

1. U.S. Patent No. 5,649,076 issued to Nishizaka et al. on 07/15/97.
2. U.S. Patent No. 7,016,749 B2 issued to Kuzumaki et al. on 03/21/06.
3. U.S. Patent No. 7,039,469 B1 issued to Haws et al. on 05/02/06.
4. U.S. Patent Application Publication US2003/0071810 A1 published by Shoov et al. on

04/17/03.

5. U.S. Patent No. 6,611,725 B1 issued to Harrison et al. on 08/26/03.

9. All Claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne Lo whose telephone number is (571)272-5876. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571)272-2297. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private

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Suzanne Lo
Patent Examiner
Art Unit 2128

/SL/
12/19/07


KAMINI SHAH
SUPERVISORY PATENT EXAMINER